

IN THE CLAIMS

Claims 1-14 were previously cancelled. Claims 15, 16, 27, 28, 33 and 34 are currently amended. Claims 17-26, 29-32, 35 and 36 are carried forward, all as follows:

Claims 1-14 (Cancelled)

15. (Currently Amended) A method for analyzing color deviation of printed images including:
- providing a printed an image sensor;
 - using said printed image sensor for generating separate pixel by pixel image sensor signals of each of first, second and third color channels of a printed an image;
 - providing a separate image sensor signal for each of said first, second and third separated color channels;
 - providing a first calculation specification;
 - linking said first color channel image sensor signal with said second color channel image sensor signal by using said a first calculation specification;
 - generating a first output signal of a first resultant compensation color channel using said first calculation specification linked first and second color channel image sensor signals;
 - providing a second calculation specification;
 - linking said third color channel image sensor signal with a combination of said first and second color channel image sensor signals by using said a second calculation specification;
 - generating a second output signal of a second resultant compensation color channel using said second calculation specification linked third color channel image sensor signal and said combination of said first and second color channel image signals;

forming said first resultant compensation color channel corresponding to a red/green receptive field of color perception of a human eye;

forming said second resultant compensation color channel corresponding to a blue/yellow receptive field of color perception of a human eye;

selecting said first calculation specification for forming a weighted difference between said second color channel image sensor signal and said first color channel image sensor signal;

selecting said second calculation specification for forming a weighted difference between said a combination of said first color channel image sensor signal and said second color channel image sensor signal, and said third color channel image sensor signal; and

classifying said first and said second output signals of said first and second compensation color channels[.]; and

determining an acceptability of said printed image using said classification of said first and second output signals.

16. (Currently Amended) A method for analyzing color deviation of printed images including:

providing a printed an image sensor;

using said image sensor for generating separate pixel by pixel image sensor signals of each of first, second and third color channels of a printed an image;

providing a separate image sensor signal for each of said first, second and third separated color channels;

providing a first calculation specification;

linking said first color channel image sensor signal with said second color channel image sensor signal using said a first calculation specification;

generating a first output signal of a first resultant compensation color channel using said first calculation specification linked first and second color channel image sensor signals;

providing a second calculation specification;

linking said third color channel image sensor signal with a combination of said first and second color channel image sensor signals by using said a second calculation specification;

generating a second output signal of a second resultant compensation color channel using said second calculation specification linked third color channel image sensor signal and said combination of said first and second color channel image signals;

forming said first resultant compensation color channel corresponding to a red/green receptive field of color perception of a human eye;

forming said second resultant compensation color channel corresponding to a blue/yellow receptive field of color perception of a human eye;

selecting said first calculation specification for forming a weighted difference between said second color channel image sensor signal and said first color channel image sensor signal;

selecting said second calculation specification providing a linkage of a minimum one of the first color channel image sensor signal and the second color channel image sensor signal, with said third color channel image sensor signal; ~~and~~

classifying said first and said second output signals of said first and second compensation color channels[.]; and

determining an acceptability of said printed image using said classification of said first and second output signals.

17. (Previously Presented) The method of claim 15 further including selecting said first, second, and third color channels corresponding to the basic colors of an RGB model wherein R is red, G is green and B is blue.

18. (Previously Presented) The method of claim 16 further including selecting said first, second, and third color channels corresponding to the basic colors of an RGB model wherein R is red, G is green and B is blue.

19. (Previously Presented) The method of claim 15 further including providing each of said first, second and third color channels with adaptable spectral sensitivity.

20. (Previously Presented) The method of claim 16 further including providing each of said first, second and third color channels with adaptable spectral sensitivity.

21. (Previously Presented) The method of claim 15 further including providing at least one of said first and second calculation specification as a non-linear transformation.

22. (Previously Presented) The method of claim 16 further including providing at least one of said first and second calculation specification as a non-linear transformation.

23. (Previously Presented) The method of claim 15 further including weighting each of said first, second and third color channel image sensor signals with a coefficient.

24. (Previously Presented) The method of claim 16 further including weighting each of said first, second and third color channel image sensor signals with a coefficient.

25. (Previously Presented) The method of claim 15 further including providing a low pass filter in at least one of said first and second compensation color channels.

26. (Previously Presented) The method of claim 16 further including providing a low pass filter in at least one of said first and second compensation color channels.

27. (Currently Amended) The method of claim 15 further including providing a learning mode and an inspection mode, forming reference data values of at least one reference printed image using said first and second compensation color channels; storing said reference data values in a reference data memory; forming inspection images as inspection output signals using said first and second compensation color channels; and comparing said inspection output signals with said reference data values in said reference data memory pixel by pixel.

28. (Currently Amended) The method of claim 16 further including providing a learning mode and an inspection mode, forming reference data values of at least one reference printed image using said first and second compensation color channels; storing said reference data values in a reference data memory; forming inspection images as inspection output signals using said first and second compensation color channels; and comparing said inspection output signals with said reference data values in said reference data memory pixel by pixel.

29. (Previously Presented) The method of claim 27 further including using a classification system for comparing said inspection output signals with said reference data values.

30. (Previously Presented) The method of claim 28 further including using a classification system for comparing said inspection output signals with said reference data values.

31. (Previously Presented) The method of claim 29 including selecting said classification system from linear and non/linear classification systems including threshold value classifiers, Euclidian distance classifiers, Bayes classifiers, fuzzy classifiers and artificial neuron networks.

32. (Previously Presented) The method of claim 30 including selecting said classification system from linear and non/linear classification systems including threshold value classifiers, Euclidian distance classifiers, Bayes classifiers, fuzzy classifiers and artificial neuron classifiers.

33. (Currently Amended) The method of claim 27 further including providing said reference data Data values for a plurality of said reference images in said reference data memory and using said reference data values for delivering a tolerance window for said reference data values.

34. (Currently Amended) The method of claim 28 further including providing said reference data Data values for a plurality of said reference images in said reference data memory and using said reference data values for delivering a tolerance window for said reference data values.

35. (Previously Presented) The method of claim 15 further including selecting said images as print images.

36. (Previously Presented) The method of claim 16 further including selecting said images as print images.